

This listing of claims will replace all prior versions, and listings, of claims in the application.

Listing of Claims:

1 - 12. (Cancelled)

13. (Previously presented) A catalyst support for selective gas phase reactions in a tubular fixed bed reactor comprising a metallic monolith having channels the walls of which are adapted to receive a catalytically active phase or an intermediate layer acting as a carrier for a catalytically active phase, wherein the surface area per unit volume of the monolith is at least 6 cm²/cm³.

14. (Original) A catalyst support according to claim 13 wherein the surface area per unit volume of the monolith is at least 10 cm²/cm³.

15 – 25. (Cancelled)

26. (Previously presented) A method for selectively reacting reagents in a gas phase exothermic reaction comprising reacting said reagents in a tubular fixed bed reactor comprising a metallic monolith having channels the walls of which are adapted to receive a catalytically active phase or an intermediate layer acting as a carrier for a catalytically active phase, wherein said catalytically active phase catalyses a selective exothermic gas phase reaction.

27. (Previously presented) The method of claim 26, wherein the gas phase exothermic reaction is the selective chlorination and/or oxychlorination of alkenes or alkanes or the selective oxidation of alkenes.

28. (Previously presented) The method of claim 27, wherein the reaction is selected from the group consisting of the conversion of ethylene with chlorine to 1,2-dichloroethane, the conversion of ethylene with hydrogen chloride with air or oxygen to give 1,2-dichloroethane,

the conversion of ethane with hydrogen chloride with air or oxygen to give a saturated or unsaturated chlorinated hydrocarbon, and the reaction of methane with chlorine.

29. (Previously presented) The method of claim 27 wherein the catalyst for the oxychlorination reaction of ethylene contains copper in an amount of 1 to 12 wt % of the intermediate layer.

30. (Previously presented) The method of claim 29, wherein the catalyst also comprises at least one alkali metal, alkaline earth metal, group IIB metal or lanthanide in a total amount up to 6 wt % of the intermediate layer.

31. (Previously presented) The method of claim 27 wherein the catalyst for the oxychlorination reaction of ethane contains in the intermediate layer copper and an alkali metal in the atomic ratio 2:8.

32. (Previously presented) The method of claim 31, wherein the catalyst also comprises at least one alkaline earth metal, group IIB metal or lanthanide.

33. (Previously presented) The method of claim 27, wherein the catalyst for the selective oxidation reaction of ethylene comprises at least silver, and at least one alkali and/or alkaline earth metal.

34. (Previously presented) A method for selectively reacting reagents in a gas phase endothermic reaction comprising reacting said reagents in a tubular fixed bed reactor comprising a metallic monolith having channels the walls of which are adapted to receive a catalytically active phase or an intermediate layer acting as a carrier for a catalytically active phase, wherein said catalytically active phase catalyses a selective endothermic gas phase reaction.

35. (Previously presented) The method of claim 28 wherein the conversion of ethane with hydrogen chloride with air or oxygen produces 1,2-dichloroethane.

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36. (Previously presented) The method of claim 28 wherein the conversion of ethane with hydrogen chloride with air or oxygen produces vinyl chloride.